

Appl. No. 10/027,400  
Amdt. dated February 15, 2005  
Reply to Office Action of November 15, 2004

PATENT

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

**Claims 1-30 (canceled).**

**Claim 31 (currently amended):** A method of selecting a molecule capable of inhibiting binding of a PI3 kinase protein which binds to a ~~target-phosphorylated polypeptide~~ PDGF receptor polypeptide, comprising the steps of:

contacting said PI3 kinase protein with said ~~target-phosphorylated polypeptide~~ PDGF receptor polypeptide in the presence of said molecule in a first analysis;

contacting said PI3 kinase protein with said ~~target-phosphorylated polypeptide~~ PDGF receptor polypeptide in the absence of said molecule in a second analysis; and

comparing said analyses to determine the inhibitory effect of said molecule on said binding, wherein said PDGF receptor polypeptide contains at least one phosphorylated tyrosine at position 719 or 708 in its kinase insert (KI) region.

**Claim 32 (currently amended):** A The method of ~~Claim~~ claim 31, wherein said contacting steps are performed in succession.

**Claim 33-36 (canceled).**

**Claim 37 (new):** The method of claim 31, wherein said molecule is selected from the group consisting of peptides, peptide analogues, organic analogue molecules and drugs.

**Claim 38 (new):** The method of claim 31, wherein said contacting steps are performed in parallel.

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**Claim 39 (new):** The method of claim 31, wherein said PDGF receptor comprises a PDGF receptor polypeptide present in cells or solution.

**Claim 40 (new):** The method of claim 31, wherein said PDGF receptor polypeptide is a human PDGF receptor polypeptide.

**Claim 41 (new):** The method of claim 40, wherein said PDGF receptor polypeptide is less than about 200 amino acids comprising the receptor kinase insert (KI) region of said PDGF receptor.

**Claim 42 (new):** The method of claim 39, wherein said PDGF receptor polypeptide is present in cells, wherein the analysis of the amount of PDGF receptor binding to PI3 kinase in test cells and control cells is selected from the group consisting of proliferation rate, level of phosphatidylinositol turnover, level of protein kinase C, level of protein kinase A, cAMP level, amount of activation of phospholipase A2, cellular calcium concentration, and intracellular pH.

**Claim 43 (new):** The method of claim 31, wherein said PDGF receptor polypeptide is contacted with a peptide homologous to a sequence described in Tables 2 or 3.

**Claim 44 (new):** The method of claim 31, wherein the inhibition of the binding of the PI3 kinase protein to the PDGF receptor polypeptide occurs by competition or by interfering with said binding.

**Claim 45 (new):** The method of claim 31, wherein said PDGF receptor comprises amino acids of a B type hPDGF-R, as shown in SEQ ID NO: 4.

**Claim 46 (new):** The method of claim 31, wherein said PDGF receptor comprises amino acids beginning at 525 and ending at 919 of a B type hPDGF-R, as shown in SEQ ID NO: 4.

**Claim 47 (new):** The method of claim 31, wherein said PDGF receptor comprises amino acids beginning at 572 and ending at 919 of a B type hPDGF-R, as shown in SEQ ID NO: 4

**Claim 48 (new):** The method of claim 31, wherein said PDGF receptor comprises amino acids beginning at 663 and ending at 919 of a B type hPDGF-R, as shown in SEQ ID NO: 4

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**Claim 49 (new):** The method of claim 31, wherein said PDGF receptor comprises amino acids beginning at 663 and ending at 766 of a B type hPDGF-R, as shown in SEQ ID NO: 4.

**Claim 50 (new):** The method of claim 31, wherein said PDGF receptor comprises amino acids of an A type hPDGF-R, as shown in SEQ ID NO: 2.

**Claim 51 (new):** The method of claim 31, wherein said PDGF receptor comprises amino acids beginning at 527 and ending at 920 of an A type hPDGF-R, as shown in SEQ ID NO: 2.

**Claim 52 (new):** The method of claim 31, wherein said PDGF receptor comprises amino acids beginning at 572 and ending at 920 of an A type hPDGF-R, as shown in SEQ ID NO: 2.

**Claim 53 (new):** The method of claim 31, wherein said PDGF receptor comprises amino acids beginning at 665 and ending at 920 of an A type hPDGF-R, as shown in SEQ ID NO: 2.

**Claim 54 (new):** The method of claim 31, wherein said PDGF receptor comprises amino acids beginning at 665 and ending at 767 of an A type hPDGF-R, as shown in SEQ ID NO: 2.

**Claim 55 (new):** The method of claim 31, wherein the inhibitory effect comprises inhibiting receptor tyrosine kinase activation of said PI3 kinase with which the PDGF receptor interacts.